

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Stoneridge, Inc. is a global designer and manufacturer of highly engineered electrical and electronic systems, components, and modules for the automotive, commercial, off-highway and agricultural vehicle markets. Our products and systems are critical elements in the management of mechanical and electrical systems to improve overall vehicle performance, convenience, and monitoring in areas such as safety and security, intelligence, efficiency, and emissions. Our worldwide footprint is primarily comprised of 21 locations in 11 countries and enables us to supply global and regional automotive, commercial, off-highway, agricultural and other vehicle markets.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

January 1 2022

End date

December 31 2022

Indicate if you are providing emissions data for past reporting years

No

Select the number of past reporting years you will be providing Scope 1 emissions data for

<Not Applicable>

Select the number of past reporting years you will be providing Scope 2 emissions data for

<Not Applicable>

Select the number of past reporting years you will be providing Scope 3 emissions data for

<Not Applicable>

C0.3

(C0.3) Select the countries/areas in which you operate.

- Argentina
- Brazil
- China
- Estonia
- France
- Germany
- Mexico
- Netherlands
- Sweden
- United Kingdom of Great Britain and Northern Ireland
- United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, a Ticker symbol	SRI
Yes, a CUSIP number	86183P102

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Board-level committee	<p>The highest level of oversight on sustainability issues lies within the Board of Directors. The Compliance & Ethics ("C&E") Committee oversees the Company's policies, strategies and performance related to sustainability matters and corporate social responsibility, except where delegated to other Board committees. The C&E committee reviews these matters with management, at least annually, and provide updates to the Board. Stoneridge's Director of Compliance and EHS updates the C&E Committee on a quarterly basis regarding Stoneridge's ongoing sustainability efforts and the ESG Committee's activities.</p> <p>The C&E Committee oversees the cross-functional team (the "ESG Committee") leading the development of the ESG strategy roadmap and frameworks for ESG reporting, including all sustainability and climate-related initiatives/decisions. For example, our efforts include:</p> <ul style="list-style-type: none"> * Expanded responsibility in the Compliance & Ethics Committee Charter * Engagement of external sustainability consultants * Submission of 2022 CDP public climate change disclosures * Remediation of past CDP, ISS, and other reporting agencies disclosures to improve ESG ratings * Peer benchmarking and ESG reporting gap analysis

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – all meetings	<p>Reviewing and guiding annual budgets</p> <p>Reviewing and guiding strategy</p> <p>Reviewing and guiding the risk management process</p>	<Not Applicable>	The Compliance & Ethics (C&E) Committee of the Board reviews the ongoing efforts of the ESG Committee and collaboration with an external sustainability partner to further develop and implement a robust sustainability strategy within Stoneridge. The C&E Committee updates the BOD at regularly scheduled meetings and no less than four times per year.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	Per the Nominating and Corporate Governance Committee charter, the criteria used to assess competence of board member(s) on climate-related issues include skill and experience in the context of the needs of the Board. The Committee shall conduct searches for prospective Board members whose skills and characteristics reflect those desired and may consider candidates proposed by the Chief Executive Officer. The Committee shall select prospective Board members who have the highest personal and professional integrity, who have demonstrated exceptional ability and judgment and who the Committee believes will be effective, in conjunction with the other members of the Board, in collectively serving the long-term interests of the stockholders.	<Not Applicable>	<Not Applicable>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Other C-Suite Officer, please specify (Chief Human Resources Officer and Assistant General Counsel - Labor & Employment (CHRO))

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Integrating climate-related issues into the strategy
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

<Not Applicable>

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

Beyond the C&E Board Committee, the "Chief Human Resources Officer and Assistant General Counsel - Labor & Employment" (CHRO) has oversight and operational management of the development of a sustainability strategy. The ESG Committee was created in late 2020. A key member of the ESG committee is the Director of Compliance and EHS who reports to the CHRO - placing sustainable development efforts at the heart of the compliance organization.

Stoneridge's 2022 efforts include:

- *Remediation of our 2022 CDP Disclosure and ISS ESG ratings.
*Peer benchmarking and ESG reporting gap analysis to help guide our efforts and further inform our sustainability efforts.
*SBTi modelling project for Scope 1 and Scope 2 GHG emissions data for eight (8) Stoneridge facilities using the SBTi Sectoral Decarbonization Approach and the Absolute Contraction Approach methods; and modeling Scope 3 GHG emissions data and activity data for eight (8) Stoneridge facilities using the SBTi Scope 3 tool and the Absolute Contraction Approach, Economic Intensity and Physical Intensity methods.
*Engaged an external ESG expert to guide us through a special project to Elevate ESG at Stoneridge. This effort includes ESG mapping, information gathering, identifying ESG policy gaps and developing key ESG policies to address those gaps, developing key messages for ESG communications, and the creation of our inaugural CSR report to communicate Stoneridge's ESG efforts to key stakeholders in late 2023.

Once fully developed, our sustainability strategy will include revised site-specific targets for emissions and energy consumption reductions in operations. These efforts will be driven by the ESG Committee with executive leadership oversight. The ESG committee (comprised of members from Compliance, Environmental Health and Safety, Procurement and Investor Relations) meets regularly to oversee and monitor progress on our sustainability initiatives and to develop strategies to reduce Stoneridge's impact on the environment.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

Table with 3 columns: Provide incentives for the management of climate-related issues, Comment. Row 1: Yes

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive

Other, please specify (ESG Committee)

Type of incentive

Non-monetary reward

Incentive(s)

Public recognition

Performance indicator(s)

Other (please specify) (Company performance against a climate-related sustainability index)

Incentive plan(s) this incentive is linked to

This position does not have an incentive plan

Further details of incentive(s)

The internal ESG Committee receives recognition not based on money. This incentive takes the form of acknowledgement or praise for our ESG efforts and is received from our colleagues, executive leadership team, and Board of Directors.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The non-monetary recognition we receive (such as verbal praise and public recognition) helps to boost our overall morale, bolster our team and gives us a real sense of value which helps us stay engaged and fulfilled in the ESG work we do for our company.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	1	3	
Medium-term	3	10	
Long-term	10	30	

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Substantive financial or strategic impact on our business is assessed within Stoneridge's Enterprise Risk Management (ERM) process. More specifically, substantive financial or strategic impact is evaluated at the enterprise level based upon input across all business units, geographies and throughout various levels within the organization. The ERM process focuses on evaluating Stoneridge's exposure to each of the top risks identified based on the extent to which the risk event might affect Stoneridge (impact), the possibility that the risk event will occur (likelihood) and the time it takes for the risk event to manifest (speed). Risks are evaluated based on internally assessed dollar amounts, using a range from no impact to the financial statements to 15% forecasted Earnings Before Interest Tax Depreciation and Amortization ("EBITDA") or greater, relative to the reporting period. These internally assessed values are net of potential mitigation activities.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

Stoneridge's leadership understands the importance of a sustainable operations model. In late 2020, we began our sustainability journey and continue to develop and drive better processes and standardization across the organization. To this end, we have included climate-related risks and opportunities language in our ERM process. Substantive financial or strategic impact on our business is assessed within Stoneridge's Enterprise Risk Management (ERM) process. More specifically, substantive financial or strategic impact is evaluated at the enterprise level based upon input across all business units, geographies and throughout various levels within the organization. The ERM process focuses on evaluating Stoneridge's exposure to each of the top risks based on the extent to which the risk event might affect Stoneridge (impact), the possibility that the risk event will occur (likelihood) and the time it takes for the risk event to manifest (speed). Risks are evaluated based on internally assessed dollar amounts for impact to financial statements, relative to the reporting period. These internally assessed values are net of potential mitigation activities. The results of this risk assessment are presented to the Board of Directors at the September board meeting each year.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & Inclusion	Please explain
Current regulation	Relevant, always included	<p>Stoneridge is a designer and manufacturer of highly engineered electrical and electronic systems, components, and modules, primarily for the automotive, commercial vehicle, off-highway and agricultural vehicle markets sector and our activities are subject to numerous legal requirements, including regulations related to climate change and energy. As an example, our operations are subject to various federal, state, local and foreign laws and regulations governing, among other things, emissions to air, discharge to water and the generation, handling, storage, transportation, treatment, and disposal of waste and other materials.</p> <p>We monitor compliance with environmental laws and regulations. Stoneridge businesses are subject to laws and will comply with all applicable environmental, health and safety (EHS) laws and regulations in every country in which we do business as well as all Stoneridge EHS policies and standards. This is further addressed in Stoneridge's Code of Conduct and is clearly stated as follows: "We will operate our business and personally conduct ourselves in our workplace in a manner that supports employee safety, treats all equally and respectfully, benefits our communities, and remains mindful of our impact on the environment." Additionally, our Supplier Code of Conduct states, "Suppliers will comply with all local, state, and federal laws, rules, and legal regulations for all countries in which they do business. This includes, but is not limited to, laws and regulations relating to environmental, occupational health and safety, and labor practices. Supplier will increase efficiency throughout their companies and take measures to reduce their energy use, water use, wastes, and other emissions. Supplier will look to conserve resources and protect the communities and environment around them."</p>
Emerging regulation	Relevant, always included	<p>Stoneridge recognizes the importance of emerging regulations and their impact on our product portfolio. Both U.S. and international laws and regulations applicable to us have been increasing in scope and complexity. For example, both U.S. and foreign governments and government agencies regulate the automotive industry, and they have previously and may in the future impose new restrictions and/or fees related to carbon emissions levels. Changes in environmental and climate change laws and regulations, including laws relating to greenhouse gas emissions, have led to new and additional investment in products.</p> <p>To that end, the U.S. SEC has proposed rules to provide more consistent, comparable, and reliable information to investors through requirements in financial reporting so they can better evaluate the impact of climate-related matters on companies. Stoneridge management is closely monitoring the US SEC proposed climate disclosures. The audit committee has been briefed on the proposed disclosures and we have worked with our outside advisors to make sure we stay informed on rule development and disclosure obligations.</p>
Technology	Relevant, sometimes included	<p>Stoneridge evaluates our technologies relative to emerging trends in the marketplace. Stoneridge is well aligned with the transportation industry trend towards electrification of vehicles. Our customers are increasingly utilizing electronic technology to comply with more stringent regulations (particularly emissions and safety) and to meet end-user demand for improved vehicle performance and greater convenience. As a result of this trend, per-vehicle electronic content has been increasing. Our technology and our partnership-oriented approach to product design and development enables us to develop next generation products and systems for this trend. For example, our MirrorEye® technology is a breakthrough improvement for road safety and fuel efficiency. Stoneridge technologies help manufacturers accurately monitor and manage vehicle emissions to meet exhaust, fuel economy and other regulations; for example, exhaust gas temperature sensors control and monitor engine components and after-treatment systems, protecting the engine from critically high exhaust temperatures. The canister vent solenoid valve (CVS) enables on board diagnostics (OBD) for evaporative emissions and our vapor block valve (VBV) helps to manage evaporative emissions.</p>
Legal	Relevant, always included	<p>Through our ERM process and various internal working groups we continually monitor and assess impacts from a legal perspective. We have not identified any material impacts from climate-related litigation such as legal action for non-compliance with customers' changing climate-related requirements. However, as stated in our 2022 annual report, "Our operations are subject to various federal, state, local and foreign laws and regulations governing, among other things, emissions to air, discharge to water and the generation, handling, storage, transportation, treatment and disposal of waste and other materials. We believe that our business, operations and facilities have been and are being operated in compliance, in all material respects, with applicable environmental and health and safety laws and regulations, many of which provide for substantial fines and criminal sanctions for violations." For example, we monitor and assess impacts related to new or changing laws and regulations or related interpretation and policies.</p>
Market	Relevant, always included	<p>The markets in which Stoneridge operates are driven by a variety of complex and inter-related external factors, such as economic growth, political stability, and public policies. The transportation industry is dependent on public policy regarding the environment and transportation and increasing urbanization. We strive to stay ahead of market changes with robust investments in research and development at our businesses. As an example, our Control Devices strategy has aligned with industry trends towards electrification, focusing on drivetrain agnostic technologies including electro-mechanical powertrain actuation. Another example of market-related risk is the increase of expectations regarding GHG emissions from governments following Paris agreement as well as the carbon neutrality targets identified. In Europe, where Stoneridge generates approximately one-third of its revenue, countries have set targets to reduce their global footprint. These engagements might have a direct impact on technical specifications regarding energy type and therefore directly impact Stoneridge business through rising demand for low-carbon solutions and products (i.e., Stoneridge's emissions sensor products).</p>
Reputation	Relevant, always included	<p>We do not anticipate any adverse reputational impact related to climate change. Stoneridge is exposed to the risk of negative media coverage arising from our products, customers, or people – either our own employees or third parties – acting intentionally or unintentionally. As an example of our mitigation efforts, we continually assess our reputation using media monitoring programs. In addition, our Code of Conduct ("Code") sets clear expectations for our fundamental standards of legal and ethical behavior. Our Code applies to all our employees (full-time, part-time, and temporary), directors, and contractors. We expect that suppliers, agents, and others acting on our behalf will act in accordance with the spirit of our Code as well.</p>
Acute physical	Relevant, always included	<p>Stoneridge manufacturing sites conduct risk assessments within the contingency plan process. For example, our site in Tallinn, Estonia has identified snowstorms, windstorms, and flooding as being significant environmental disaster risks. The acute risks induced by climate change such as hurricanes, strong winds, and floods, could cause damage to the Stoneridge's sites and endanger the safety of employees.</p> <p>Additionally, Stoneridge uses an external software as a service to proactively identify, assess and mitigate supply chain risk over a whole spectrum of risk. We have data sources that assess financial risk, natural disaster risk, reputational risk, geopolitical risk, man-made risk, and cyber risk. We have the ability to reveal supply chain dependencies and risky situations and take actions to prevent risk from costing our company. Artificial intelligence monitors our supply chain risk in real time so we can accurately understand our risk exposure and make the right decisions.</p>
Chronic physical	Relevant, always included	<p>The chronic risks induced by climate change such as rising sea levels, chronic heat waves or rain pattern modifications may cause Stoneridge to consider these parameters for future asset establishments. As an example, water stress is a chronic physical risk for our Juarez plant. Water conservation projects are reviewed and implemented on an annual basis.</p>

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Market	Changing customer behavior
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Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Stoneridge's emissions sensor products monitor the emissions of vehicles. In recent years, we have experienced an increase in demand for these products, particularly in Asia, due to increased regulation on emissions and expect this trend to continue through the medium-term. However, as consumers and our customers trend toward electrified vehicles, for which demand is expected to continuously increase over the next decade, there is risk of loss of revenue of our emissions sensor business as these products are specific to internal combustion and hybrid engines. To mitigate this risk, Stoneridge has and will continue to rotate its product portfolio and focus on drivetrain agnostic products to align with the industry shift towards electrification. For example, in 2020, the company announced the divestiture of the particulate matter soot sensor ("soot sensor") product lines in response to the change in market trends in the diesel fuel passenger car and commercial vehicle markets. The soot sensor product lines and assets were located in North America and Europe.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

41250000

Explanation of financial impact figure

The potential financial impact figures are calculated using qualitative and quantitative information provided publicly. During our fourth-quarter 2022 earnings call, we provided a long-term revenue target of \$1.3 billion to \$1.5 billion by 2027. During the call, we also stated that our revenue is expected to be 90%+ drivetrain agnostic by 2027. Drivetrain agnostic means that the product can be put in any type of vehicle regardless of drivetrain. Therefore, the remaining 10% or less would be products that can only be applicable to internal combustion engine and/or hybrid drivetrains, which is primarily our emissions sensor products. The potential financial impact to revenue ranges from no impact, or \$0, to 10% of the high-end of our targeted revenue range by 2027 (\$1.5 billion x 10% = \$150 million).

Furthermore, we have stated we expect 25-30% incremental/decremental contribution margins on revenue. Therefore, using the mid-point of this contribution margin on the high-end the non-drivetrain agnostic portion of our long-term target, the expected contribution for the products at risk is ~\$41.3 million (\$150 million revenue x 27.5% = \$41.3 million).

Cost of response to risk

5788000

Description of response and explanation of cost calculation

The total cost to respond to this risk is unable to be determined at this time due to the wide range of expectations regarding market conditions and as a result changing customer behavior.

However, one example of costs to respond to this risk is the 2020 divestiture of the soot sensor business which strategically was not aligned with the industry trends or the company's long-term strategy. Total restructuring costs incurred from divesting the soot sensor business was \$5.8 million as reported in our 2022 Form 10-K.

Comment

Stoneridge has transformed its organization to align with industry megatrends by rotating its portfolio into drivetrain agnostic products and investing in engineering for future products. Although there is a risk of reduced sales for our emissions sensor products, there is incremental revenue opportunity for products that are drivetrain agnostic. As such, we do not believe this risk should be viewed on a stand-alone basis. Similarly, part of our strategy has been to invest in drivetrain agnostic technologies and as such, we believe our product portfolio will continue to align with current market conditions, customer preferences and the regulatory environment.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.**Identifier**

Opp1

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues through access to new and emerging markets

Company-specific description

Stoneridge focuses on four main industry megatrends: 1) Security and Safety; 2) Intelligence; 3) Efficiency; and 4) Emissions. One of our products, the MirrorEye® camera-based vision system, replaces traditional mirrors on commercial vehicles and other markets. MirrorEye's value proposition is focused on safety with an additional benefit of improved fuel economy when mirrors are removed. While the safety benefit of MirrorEye is compelling on its own, the camera monitor system also provides an aerodynamic benefit, due to the reduced surface area exposed to the airstream during vehicle operation. As fuel efficiency standards continue to advance, MirrorEye is transforming commercial vehicle safety while reducing fuel consumption through advanced aerodynamics. This fuel savings translates into a positive environmental impact due to a reduction in CO2 emissions.

Stoneridge has completed trials with public and private fleet partners in North America to market the product. Several fleets that have purchased the MirrorEye system through retrofit applications (the device is outfitted onto the vehicle as an aftermarket product) or a pre-wire program that provides the wiring harness into cab for ease of outfitting the commercial vehicle for a retrofit application. MirrorEye retrofit and pre-wire options continues to gain traction as Stoneridge has publicly announced several partnerships with fleets for MirrorEye retrofit program expansions or having the intention to install MirrorEye across their fleets over time. There is opportunity for additional partnerships and expansions.

There are now two Original Equipment Manufacturer ("OEM") program awards that have launched with commercial vehicle customers. The first OEM program launched in Europe at the end of 2021 and the second OEM program launched in North America in April 2023. Stoneridge has an additional two OEM programs that are expected to launch in within the next couple of years. The MirrorEye OEM programs were awarded based on a take rate of approximately 15% (percentage of vehicles that would order MirrorEye on their vehicles as an option). Therefore, there is a substantial opportunity to drive revenue growth in our awarded programs as the system becomes more broadly adopted by the end-customer resulting in higher take rates. Two customers have already improved take rates due to this demand. In addition, there is an opportunity for future incremental OEM program awards with other customers.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

8500000

Potential financial impact figure – maximum (currency)

38750000

Explanation of financial impact figure

MirrorEye® revenues for 2022 were approximately \$34M through sales from the first OEM program, retrofit applications and OEM bus market sales. We also stated we expect approximately \$60 million in MirrorEye revenue in 2023. Based on current take rate assumptions for our four awarded OEM programs, we expect to generate peak annual revenue of approximately \$130 million once all programs ramp up into full production. Our last awarded program launches in Q1 2025 and it takes approximately 12 - 18 months for programs to ramp to full production. Also in the short-term, there is opportunity for additional retrofit applications to generate revenue. In the medium to longer term, there is an opportunity for additional OEM programs to be awarded and launched.

Furthermore, we have stated we expect 25-30% incremental/decremental contribution margins on revenue. Given the first OEM program launched in late 2021 and was ramping up production in 2022, we used the low-end of the contribution margin range for the minimum potential financial impact figure. Therefore, the expected minimum contribution for MirrorEye is ~\$850k (\$34 million x 25% = \$850k). The potential maximum contribution for this opportunity is calculated based upon peak annual revenue for our total awarded programs. Using the mid-point contribution margin expectation, the maximum potential financial impact opportunity is ~\$35.8 million (\$130 million revenue x 27.5% = \$35.8 million).

Cost to realize opportunity

43000000

Strategy to realize opportunity and explanation of cost calculation

A significant amount of engineering design and development was required to bring the MirrorEye® camera-based mirror platform and similar advanced technologies to market and into production. In our fourth quarter 2019 earnings materials, we quantified the amount of engineering investment in Advanced Technologies, including MirrorEye®, from 2017 to 2020 (with 2020 being estimated) at approximately \$43 million. Incremental engineering investment in MirrorEye® has continued in 2021, 2022 and 2023 however that amount has not been disclosed.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a climate transition plan within two years

Publicly available climate transition plan

<Not Applicable>

Mechanism by which feedback is collected from shareholders on your climate transition plan

<Not Applicable>

Description of feedback mechanism

<Not Applicable>

Frequency of feedback collection

<Not Applicable>

Attach any relevant documents which detail your climate transition plan (optional)

<Not Applicable>

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future

While we do not have a completed transition plan, we are in the process of developing science-based targets from which a climate transition plan will be developed.

Explain why climate-related risks and opportunities have not influenced your strategy

<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	No, but we anticipate using qualitative and/or quantitative analysis in the next two years	Important but not an immediate priority	We are in the planning stage of climate scenario analysis and are gathering data and formulating the key questions to be asked of the analysis. We anticipate the analysis will commence within the next two years.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Stoneridge's overall strategy focuses on four main industry megatrends: 1) Security and Safety; 2) Intelligence; 3) Efficiency; and 4) Emissions. With this focus, we have developed several new products that focus on one or more of these megatrends that have launched already or will be launching in the near-term. Our focus on fuel efficiency and emissions aligns with our climate-related opportunities. As an example, one of our recently developed products is the MirrorEye® camera-based vision system that replaces traditional mirrors on commercial vehicles. MirrorEye®'s value proposition is focused on safety with an additional benefit of improved fuel economy when mirrors are removed. As fuel efficiency standards continue to advance, MirrorEye® is transforming commercial vehicle safety while reducing fuel consumption through advanced aerodynamics. This fuel savings translates into a positive environmental impact due to a reduction in CO2 emissions. While the safety benefit of MirrorEye® is compelling on its own, the camera monitor system also provides an aerodynamic benefit, due to the reduced surface area exposed to the airstream during vehicle operation. Based on a study conducted by an independent third party and feedback from our fleet partners, the impact of fuel consumption with MirrorEye® versus traditional mirrors, results in 2-3% improvement in fuel economy in typical applications. For a typical class 8 long haul truck, which uses roughly 11,000 gallons gasoline equivalent (based on government data) this translates into meaningful cost savings. This also translates into roughly 250 gallons of fuel saved per vehicle per year, which translates into an environmental impact of roughly 5,000 pounds (2.5 tons) of CO2 emissions reduction per year per vehicle (based on information at U.S. Energy Information Administration (EIA). This data provides for a compelling value proposition for our customers as they should receive the return on their investment within approximately two years just on fuel savings alone, and the product aligns with our customers environmental/climate-related initiatives.
Supply chain and/or value chain	Yes	Over the past few years, the world's largest automotive OEMs have put an increasing emphasis on reducing their overall value chain carbon footprint to the point of eventual carbon neutrality. We supply most of our products, predominantly on a sole-source basis, to many of the world's leading automotive and commercial vehicle OEMs and select non-vehicle OEMs, as well as certain automotive and commercial vehicle Tier 1 suppliers. Our customers are increasingly utilizing electronic technology to comply with more stringent regulations (particularly emissions and safety) and to meet end-user demand for improved vehicle performance and greater convenience. As a result of this trend, per-vehicle electronic content has been increasing. Our technology and our partnership-oriented approach to product design and development enables us to develop next generation products and systems for this trend. Stoneridge reports its carbon emissions within the Supply Chain module of the CDP climate change questionnaire. Additionally, we are developing a sustainability strategy that we expect will be used across our world-wide facilities to drive energy-efficient operations. Additionally, Stoneridge procurement qualifies and monitors our direct suppliers to improve sustainability and compliance and to meet customer demands and regulatory requirements. We conduct supplier assessments and obtain certification from our direct suppliers to confirm their compliance with the relevant sustainability standards. We also conduct social media monitoring to ensure we know first about reputational threats caused by our suppliers. The supplier assessments cover environmental protection, supply chain responsibility, anti-bribery/anti-corruption, diversity, quality management, conflicts of interest, health & safety, and human rights and labor. In the future we intend to include questionnaires covering energy management and carbon footprint.
Investment in R&D	Yes	Our products and systems are critical elements in the management of mechanical and electrical systems to improve overall vehicle performance, convenience, and monitoring in areas such as safety and security, intelligence, efficiency, and emissions. Our Control Devices segment has several actuation applications that position us well to take advantage of the continued electrification of the drivetrain. We continue to focus on product development and systems capabilities to expand in those areas. Our transmission and axle-based actuation systems will provide the technical competencies to execute this expansion. Additionally, as an adjacency to our core competencies, we have explored other electrified actuation applications where our capabilities may provide a competitive advantage including electronic park brake applications. We believe that investments in these areas will drive strong growth opportunities.
Operations	Yes	Due to climate-related demand for carbon efficiency and GHG reporting, we continually review our operations, including our facilities, and are taking into consideration utilizing more energy-efficient facilities in the next 3-5 years. We are also evaluating green energy procurement options in the near term. We have set a GHG reduction target as a result of this climate risk.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures	When developing our annual budget (short-term, 1 year) and our long-term forecast (called the Long-Range Plan ("LRP") which is for the medium term of 5 years), we consider climate related risks and opportunities. Below are two examples of items that have influenced our budget and LRP financial planning processes as related to climate-related risk: 1. Impact of revenue and related costs associated with the increase in per-vehicle electronic content or new product launches: For example, in 2022, we developed the 2023 Annual Budget and considerations were made for the impact of revenue and related design and development costs related to the new MirrorEye® OEM production launches and ramp-up in production. 2. Allocation of design and development expenses for future products, in particular, the trends toward electrification of vehicles: For example, in our Control Devices segment, we are investing in engineering resources to focus on electrified actuation products such as the Electrified Transmission Actuators that will be used in Hybrid and fully electric vehicle platforms. In developing the 2023 budget at the end of 2022, we had to make decisions on the amount to invest in the future due to recent trends to electrified vehicles in the automotive market.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	No, but we plan to in the next two years	<Not Applicable>

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Is this a science-based target?

No, but we anticipate setting one in the next two years

Target ambition

<Not Applicable>

Year target was set

2019

Target coverage

Company-wide

Scope(s)

Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

<Not Applicable>

Base year

2019

Base year Scope 1 emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 2 emissions covered by target (metric tons CO2e)

19120

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)

<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

19120

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

<Not Applicable>

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1:

Purchased goods and services (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2025

Targeted reduction from base year (%)

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

16252

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

15823

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

15823

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

114.958158995816

Target status in reporting year

Achieved

Please explain target coverage and identify any exclusions

In 2019 we set a target to achieve a 15% reduction of Absolute Scope 2 GHGs company wide by 2025 as measured against a 2019 baseline. We are excluding small facilities from which scope 2 emissions are not relevant based on the GHG Protocol.

Plan for achieving target, and progress made to the end of the reporting year

<Not Applicable>

List the emissions reduction initiatives which contributed most to achieving this target

Process Optimization, Reduction of operational square footage, and stop production on PM sensor.

Target reference number

Abs 2

Is this a science-based target?

No, but we anticipate setting one in the next two years

Target ambition

<Not Applicable>

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

<Not Applicable>

Base year

2019

Base year Scope 1 emissions covered by target (metric tons CO2e)

761.2

Base year Scope 2 emissions covered by target (metric tons CO2e)

19120

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)

<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

19881

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2025

Targeted reduction from base year (%)

15

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

16898.85

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

889.5

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

15823

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

16712

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

106.265613735057

Target status in reporting year

Achieved

Please explain target coverage and identify any exclusions

In 2021 we set a target to achieve a 15% reduction of Absolute Scope 2+ Absolute Scope 1 GHGs companywide by 2025 as measured against a 2019 baseline. We are excluding small facilities from which scope 2 + scope 1 emissions are not relevant based on the GHG Protocol.

Plan for achieving target, and progress made to the end of the reporting year

<Not Applicable>

List the emissions reduction initiatives which contributed most to achieving this target

Process Optimization, reduction of manufacturing floorspace, stop production of PM Sensor.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

No other climate-related targets

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	2	2084
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization
---	----------------------

Estimated annual CO2e savings (metric tonnes CO2e)

922

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

1-2 years

Comment

Shutting off molding presses in off-shifts

Initiative category & Initiative type

Other, please specify	Other, please specify (Divestiture of product line)
-----------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

1161.8

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Stop production of PM sensor line

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	As a part of our Environmental Management System, we evaluate how our operations impact the environment. As a result of this evaluation, we develop action items to reduce negative impact on the environment and resources will be allocated to implement these action items.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

No

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

Name of organization(s) acquired, divested from, or merged with

<Not Applicable>

Details of structural change(s), including completion dates

<Not Applicable>

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

761.2

Comment

Scope 2 (location-based)

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

19120

Comment

Scope 2 (market-based)

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

19120

Comment

The location-based result has been used as a proxy since a market-based figure cannot be calculated.

Scope 3 category 1: Purchased goods and services

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

101990

Comment

Scope 3 figures were estimated based on "CDP Technical Note: Relevance of Scope 3 Categories by Sector," published on April 11, 2022.

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 5: Waste generated in operations

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 6: Business travel

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 7: Employee commuting

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 11: Use of sold products

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

1628254

Comment

Scope 3 figures were estimated based on "CDP Technical Note: Relevance of Scope 3 Categories by Sector," published on April 11, 2022.

Scope 3 category 12: End of life treatment of sold products

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

29670

Comment

Scope 3 figures were estimated based on "CDP Technical Note: Relevance of Scope 3 Categories by Sector," published on April 11, 2022.

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

IEA CO2 Emissions from Fuel Combustion

US EPA Emissions & Generation Resource Integrated Database (eGRID)

Other, please specify (Scope 3 figures were estimated based on "CDP Technical Note: Relevance of Scope 3 Categories by Sector", published on April 11, 2022.)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

889.5

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We have operations where we are able to access electricity supplier emission factors or residual emissions factors, but are unable to report a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

15823

Scope 2, market-based (if applicable)

<Not Applicable>

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source of excluded emissions

Small sales offices and/or warehouses with insignificant contribution to GHG emissions operate in Germany, Argentina, France and Scotland.

Scope(s) or Scope 3 category(ies)

Scope 1

Scope 2 (location-based)

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source

<Not Applicable>

Relevance of Scope 3 emissions from this source

<Not Applicable>

Date of completion of acquisition or merger

<Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents

1.2

Estimated percentage of total Scope 3 emissions this excluded source represents

<Not Applicable>

Explain why this source is excluded

Estimated emissions range for the excluded sites is around 101 metric tons per year which is well below the 5% threshold set by the GHG Protocol.

Explain how you estimated the percentage of emissions this excluded source represents

Invoices of energy providers during 2022

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

85736

Emissions calculation methodology

Other, please specify (Scope 3 figures were estimated based on "CDP Technical Note: Relevance of Scope 3 Categories by Sector", published on April 11, 2022)

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Estimated figure from calculations based on CDP's published guidance "CDP Technical Note: Relevance of Scope 3 Categories by Sector," April 11, 2022, for the Capital Goods sector: Scope 3 category 1 "Purchased goods and services" should also be relevant to Capital Goods companies to account for upstream emissions associated with the materials used to manufacture their products (CDP, 2018:11). Category 1 was reported as "Relevant, calculated" by 57% of Capital Goods companies responding to CDP, but only accounted for 5.7% of total Scope 3 emissions and 5.6% of total Scope 1+2+3 emissions reported by the sector. Our Scope 1 and Scope 2 data were used to calculate Total Scope 3. Using data: $5.6\% \text{ of Scope 1} + \text{Scope 2} + \text{Scope 3} = 0.056(889.5+15823+1504143) = 85,736 \text{ MT CO}_2\text{e}$ is our Scope 3 Category 1 amount.

Capital goods

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Per CDP's published guidance "CDP Technical Note: Relevance of Scope 3 Categories by Sector," April 11, 2022, Other Upstream Categories (e.g., excluding Category 1) of Scope 3 comprised 1.44% of total Scope 1+2+3 emissions reported by the Capital Goods sector. Our Scope 1 and Scope 2 data were used to calculate Total Scope 3 = $(90 \times 16,713) = 1,504,143 \text{ MT CO}_2\text{e}$. Total GHG emissions are = $S1 + S2 + S3 = 1,520,856 \text{ MTCO}_2\text{e}$. Other Upstream Categories of Scope 3 collectively = $.0144(1,520,856) = 21,900 \text{ MTCO}_2\text{e}$. While this amount in total is relevant, when distributed among our applicable Upstream Categories (2, 3, 4, 5, 6, 7 and 8), the amount of emissions attributed to this specific Category of Scope 3 emissions is much less and is not itself relevant.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Per CDP's published guidance "CDP Technical Note: Relevance of Scope 3 Categories by Sector," April 11, 2022, Other Upstream Categories (e.g., excluding Category 1) of Scope 3 comprised 1.44% of total Scope 1+2+3 emissions reported by the Capital Goods sector. Our Scope 1 and Scope 2 data were used to calculate Total Scope 3 = $(90 \times 16,713) = 1,504,143 \text{ MT CO}_2\text{e}$. Total GHG emissions are = $S1 + S2 + S3 = 1,520,856 \text{ MTCO}_2\text{e}$. Other Upstream Categories of Scope 3 collectively = $.0144(1,520,856) = 21,900 \text{ MTCO}_2\text{e}$. While this amount in total is relevant, when distributed among our applicable Upstream Categories (2, 3, 4, 5, 6, 7 and 8), the amount of emissions attributed to this specific Category of Scope 3 emissions is much less and is not itself relevant.

Upstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Per CDP's published guidance "CDP Technical Note: Relevance of Scope 3 Categories by Sector," April 11, 2022, Other Upstream Categories (e.g., excluding Category 1) of Scope 3 comprised 1.44% of total Scope 1+2+3 emissions reported by the Capital Goods sector. Our Scope 1 and Scope 2 data were used to calculate Total Scope 3 = $(90 \times 16,713) = 1,504,143 \text{ MT CO}_2\text{e}$. Total GHG emissions are = $S1 + S2 + S3 = 1,520,856 \text{ MTCO}_2\text{e}$. Other Upstream Categories of Scope 3 collectively = $.0144(1,520,856) = 21,900 \text{ MTCO}_2\text{e}$. While this amount in total is relevant, when distributed among our applicable Upstream Categories (2, 3, 4, 5, 6, 7 and 8), the amount of emissions attributed to this specific Category of Scope 3 emissions is much less and is not itself relevant.

Waste generated in operations

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Per CDP's published guidance "CDP Technical Note: Relevance of Scope 3 Categories by Sector," April 11, 2022, Other Upstream Categories (e.g., excluding Category 1) of Scope 3 comprised 1.44% of total Scope 1+2+3 emissions reported by the Capital Goods sector. Our Scope 1 and Scope 2 data were used to calculate Total Scope 3 = $(90 \times 16,713) = 1,504,143\text{MT CO}_2\text{e}$. Total GHG emissions are = $S1 + S2 + S3 = 1,520,856\text{ MTCO}_2\text{e}$. Other Upstream Categories of Scope 3 collectively = $.0144(1,520,856) = 21,900\text{ MTCO}_2\text{e}$. While this amount in total is relevant, when distributed among our applicable Upstream Categories (2, 3, 4, 5, 6, 7 and 8), the amount of emissions attributed to this specific Category of Scope 3 emissions is much less and is not itself relevant.

Business travel

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Per CDP's published guidance "CDP Technical Note: Relevance of Scope 3 Categories by Sector," April 11, 2022, Other Upstream Categories (e.g., excluding Category 1) of Scope 3 comprised 1.44% of total Scope 1+2+3 emissions reported by the Capital Goods sector. Our Scope 1 and Scope 2 data were used to calculate Total Scope 3 = $(90 \times 16,713) = 1,504,143\text{MT CO}_2\text{e}$. Total GHG emissions are = $S1 + S2 + S3 = 1,520,856\text{ MTCO}_2\text{e}$. Other Upstream Categories of Scope 3 collectively = $.0144(1,520,856) = 21,900\text{ MTCO}_2\text{e}$. While this amount in total is relevant, when distributed among our applicable Upstream Categories (2, 3, 4, 5, 6, 7 and 8), the amount of emissions attributed to this specific Category of Scope 3 emissions is much less and is not itself relevant.

Employee commuting

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Per CDP's published guidance "CDP Technical Note: Relevance of Scope 3 Categories by Sector," April 11, 2022, Other Upstream Categories (e.g., excluding Category 1) of Scope 3 comprised 1.44% of total Scope 1+2+3 emissions reported by the Capital Goods sector. Our Scope 1 and Scope 2 data were used to calculate Total Scope 3 = $(90 \times 16,713) = 1,504,143\text{MT CO}_2\text{e}$. Total GHG emissions are = $S1 + S2 + S3 = 1,520,856\text{ MTCO}_2\text{e}$. Other Upstream Categories of Scope 3 collectively = $.0144(1,520,856) = 21,900\text{ MTCO}_2\text{e}$. While this amount in total is relevant, when distributed among our applicable Upstream Categories (2, 3, 4, 5, 6, 7 and 8), the amount of emissions attributed to this specific Category of Scope 3 emissions is much less and is not itself relevant.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

This category is not applicable as Stoneridge does not lease any upstream assets as defined in the GHG Scope 3 Accounting and Reporting Standard. Furthermore, per CDP's published guidance "CDP Technical Note: Relevance of Scope 3 Categories by Sector," April 11, 2022, Other Upstream Categories (e.g., excluding Category 1) of Scope 3 comprised 1.44% of total Scope 1+2+3 emissions reported by the Capital Goods sector. Our Scope 1 and Scope 2 data were used to calculate Total Scope 3 = $(90 \times 16,713) = 1,504,143\text{MT CO}_2\text{e}$. Total GHG emissions are = $S1 + S2 + S3 = 1,520,856\text{ MTCO}_2\text{e}$. Other Upstream Categories of Scope 3 collectively = $.0144(1,520,856) = 21,900\text{ MTCO}_2\text{e}$. While this amount in total is relevant, when distributed among our applicable Upstream Categories (2, 3, 4, 5, 6, 7 and 8), the amount of emissions attributed to this specific Category of Scope 3 emissions is much less and is not itself relevant.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Per CDP's published guidance "CDP Technical Note: Relevance of Scope 3 Categories by Sector," April 11, 2022, Other Downstream Categories (e.g., excluding Categories 11 & 12) of Scope 3 comprised 0.24% of total Scope 1+2+3 emissions reported by the Capital Goods sector. Our Scope 1 and Scope 2 data were used to calculate Total Scope 3 = $(90 \times 16,713) = 1,504,143$ MT CO2e. Total GHG emissions are = $S1 + S2 + S3 = 1,520,856$ MTCO2e. Other Downstream Categories of Scope 3 collectively = $0.0024(1,520,856) = 3650$ MTCO2e. Further allocating this amount across our applicable Downstream Categories (9, 10, 13, 14 and 15), the amount of emissions attributed to this Category of Scope 3 emissions is much less and is not itself relevant.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Per CDP's published guidance "CDP Technical Note: Relevance of Scope 3 Categories by Sector," April 11, 2022, Other Downstream Categories (e.g., excluding Categories 11 & 12) of Scope 3 comprised 0.24% of total Scope 1+2+3 emissions reported by the Capital Goods sector. Our Scope 1 and Scope 2 data were used to calculate Total Scope 3 = $(90 \times 16,713) = 1,504,143$ MT CO2e. Total GHG emissions are = $S1 + S2 + S3 = 1,520,856$ MTCO2e. Other Downstream Categories of Scope 3 collectively = $0.0024(1,520,856) = 3650$ MTCO2e. Further allocating this amount across our applicable Downstream Categories (9, 10, 13, 14 and 15), the amount of emissions attributed to this Category of Scope 3 emissions is much less and is not itself relevant.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

1369573

Emissions calculation methodology

Other, please specify (Scope 3 figures were estimated based on "CDP Technical Note: Relevance of Scope 3 Categories by Sector", published on April 11, 2022)

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Estimated figure from calculations based on CDP's published guidance "CDP Technical Note: Relevance of Scope 3 Categories by Sector," April 11, 2022. Scope 3 category 11 "Use of sold products" is the largest category of Scope 3 emissions for the Capital Goods sector and is often an order of magnitude larger than emissions in the next largest category, category 1 "Purchased Goods and Services". Targeting emissions reductions efforts on category 11 is key to the sector's position in delivering carbon savings through their products in the end markets where decarbonization needs to take place – power generation, transmission and distribution, transport, buildings, and household consumption through the use of appliances. (CDP, 2018:11); (SBTi, 2021:23). Despite only 48% the 166 Capital Goods companies responding to CDP's 2021 climate change questionnaire on behalf of investors reporting category 11 as "Relevant, calculated," it comprised 91% of total Scope 3 emissions and 90% of total Scope 1+2+3 emissions reported by the sector. Using data: $90\% \text{ of } (Scope\ 1 + Scope\ 2 + Scope\ 3) = 0.90(890+15823+1504143) = 1,368,770$ MT CO2e is our Scope 3 Category 11 amount.

End of life treatment of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

24957

Emissions calculation methodology

Other, please specify (Scope 3 figures were estimated based on "CDP Technical Note: Relevance of Scope 3 Categories by Sector", published on April 11, 2022)

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Per CDP's published guidance "CDP Technical Note: Relevance of Scope 3 Categories by Sector," April 11, 2022, Scope 3 category 12 "End of Life" comprised 1.64% of total Scope 1+2+3 emissions reported by the sector. Our Scope 1 and Scope 2 data were used to calculate Total Scope 3 = $(90 \times 16,713) = 1,504,143$ MT CO2e. Total GHG emissions are = $S1 + S2 + S3 = 1,520,856$ MTCO2e. Category 12 emissions = $0.0164(1,520,856) = 24,942$ MTCO2e which is relevant.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

This category is not applicable as Stoneridge does not lease any downstream assets as defined in the GHG Scope 3 Accounting and Reporting Standard. Furthermore, per CDP's published guidance "CDP Technical Note: Relevance of Scope 3 Categories by Sector," April 11, 2022, Other Downstream Categories (e.g., excluding Categories 11 & 12) of Scope 3 comprised 0.24% of total Scope 1+2+3 emissions reported by the Capital Goods sector. Our Scope 1 and Scope 2 data were used to calculate Total Scope 3 = $(90 \times 16,713) = 1,504,143$ MT CO₂e. Total GHG emissions are = $S1 + S2 + S3 = 1,520,856$ MTCO₂e. Other Downstream Categories of Scope 3 collectively = $0.0024(1,520,856) = 3650$ MTCO₂e. Further allocating this amount across our applicable Downstream Categories (9, 10, 13, 14 and 15), the amount of emissions attributed to this Category of Scope 3 emissions is much less and is not itself relevant.

Franchises

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

This category is not applicable as Stoneridge does not operate any franchises as defined in the GHG Scope 3 Accounting and Reporting Standard. Furthermore, per CDP's published guidance "CDP Technical Note: Relevance of Scope 3 Categories by Sector," April 11, 2022, Other Downstream Categories (e.g., excluding Categories 11 & 12) of Scope 3 comprised 0.24% of total Scope 1+2+3 emissions reported by the Capital Goods sector. Our Scope 1 and Scope 2 data were used to calculate Total Scope 3 = $(90 \times 16,713) = 1,504,143$ MT CO₂e. Total GHG emissions are = $S1 + S2 + S3 = 1,520,856$ MTCO₂e. Other Downstream Categories of Scope 3 collectively = $0.0024(1,520,856) = 3650$ MTCO₂e. Further allocating this amount across our applicable Downstream Categories (9, 10, 13, 14 and 15), the amount of emissions attributed to this Category of Scope 3 emissions is much less and is not itself relevant.

Investments

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

This category is not applicable as Stoneridge does not operate as an investor or financial service provider. This category is designed primarily for private financial institutions. Furthermore, per CDP's published guidance "CDP Technical Note: Relevance of Scope 3 Categories by Sector," April 11, 2022, Other Downstream Categories (e.g., excluding Categories 11 & 12) of Scope 3 comprised 0.24% of total Scope 1+2+3 emissions reported by the Capital Goods sector. Our Scope 1 and Scope 2 data were used to calculate Total Scope 3 = $(90 \times 16,713) = 1,504,143$ MT CO₂e. Total GHG emissions are = $S1 + S2 + S3 = 1,520,856$ MTCO₂e. Other Downstream Categories of Scope 3 collectively = $0.0024(1,520,856) = 3652$ MTCO₂e. Further allocating this amount across our applicable Downstream Categories (9, 10, 13, 14 and 15), the amount of emissions attributed to this Category of Scope 3 emissions is much less and is not itself relevant.

Other (upstream)

Evaluation status

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Other (downstream)

Evaluation status

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

C-CG6.6

(C-CG6.6) Does your organization assess the life cycle emissions of any of its products or services?

	Assessment of life cycle emissions	Comment
Row 1	No, but we plan to start doing so within the next two years	

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.000019

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

16712.7

Metric denominator

unit total revenue

Metric denominator: Unit total

899923000

Scope 2 figure used

Location-based

% change from previous year

23.8

Direction of change

Decreased

Reason(s) for change

Other emissions reduction activities

Please explain

The sum of scope 1 emissions (889.5) and scope 2 emissions (15,823.2) location-based is equal to 16,712 metric tons CO2e.

The unit total revenue of reporting year is \$899,923,000

The intensity metric is 16,712/\$899,923,000=0.0000186.

The sum of scope 1 emissions and scope 2 location-based emissions from previous year is 18,797 metric tons CO2e and the unit total revenue of previous year was \$770,426,000.

The intensity figure from last year was 118,797/\$770,426,000= 0.0000244.

0000186-.0000244/.0000244 = -23.8% change from previous year.

The change was driven by increase of revenue and more efficient use of electricity, including the process efficiency and projects described in 4.3b.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO ₂ e)	GWP Reference
CO ₂	884.35	IPCC Fifth Assessment Report (AR5 – 100 year)
CH ₄	0.48	IPCC Fifth Assessment Report (AR5 – 100 year)
N ₂ O	0.48	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO ₂ e)
China	0
United States of America	556
Mexico	97.9
Estonia	221
Sweden	0
Brazil	14.6
Netherlands	0

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By facility

C7.3b

(C7.3b) Break down your total gross global Scope 1 emissions by business facility.

Facility	Scope 1 emissions (metric tons CO ₂ e)	Latitude	Longitude
SRI Lexington OH	556	40.66969	-82.57604
SRI Suzhou, China	0	31.297799	120.619375
SRI Orebro, Sweden	0	59.25948	15.17398
SRI Tallinn, Estonia	221	59.36439	24.70683
SRI Juarez, Mexico	97.9	32.63954	-115.42069
Barneveld	0	52.123173	5.566371
Stoneridge Brazil, Manaus	14.6	-3.131633	-59.982504
Novi, Michigan	0	42.51812	-83.44155

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO ₂ e)	Scope 2, market-based (metric tons CO ₂ e)
China	3977.8	
United States of America	7061.2	
Mexico	3545.9	
Estonia	906.1	
Sweden	27	
Brazil	100.3	
Netherlands	205	

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By facility

C7.6b

(C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
SRI Lexington OH	6493.4	
SRI Suzhou, China	3977.8	
SRI Orebro, Sweden	27	
SRI Tallinn, Estonia	906.1	
SRI Juarez, Mexico	3545.9	
Manaus, Brazil	100.3	
Novi, MI	567.8	
Barneveld	205	

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	306	Decreased	9	We implemented energy savings initiatives to reduce our energy consumption at our facilities: -Idle equipment in test labs was shut off to conserve energy. All reduction activities resulted on net savings of renewable energy consumption and 306.23 metric tons of GHG emissions (302.7 =3,319 - 3,013) where 3,319 is previous year scope 1 + scope 2 emissions from renewable energy and 3,013 is reporting year scope 1 + scope 2 emissions from renewable energy). 302/3,319=9% where 3,319 is previous year scope 1 + scope 2 emissions from renewable energy
Other emissions reduction activities	1684	Decreased	11	We implemented energy savings initiatives to reduce our energy consumption at our facilities: -All manufacturing sites with molding processes reduced operating temperatures during idle time to save energy. -Idle equipment in test labs was shut off to conserve energy. -PM Sensor line is no longer in operation. All reduction activities resulted on net savings of 1,684 metric tons of GHG emissions from non-renewable sources (1,684 =14,495 - 12,810 where 14,495 is previous year scope 1 + scope 2 emissions from non-renewable energy and 12,810 is reporting year scope 1 + scope 2 emissions from non-renewable energy). 1,684/14,495= 11% where 14,495 is previous year scope 1 + scope 2 emissions from non-renewable energy.
Divestment	0	No change	0	
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	0	No change	0	
Change in methodology	0	No change	0	
Change in boundary	0	No change	0	
Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	0	No change	0	

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C-CG7.10

(C-CG7.10) How do your total Scope 3 emissions for the reporting year compare to those of the previous reporting year?

Decreased

C-CG7.10a

(C-CG7.10a) For each Scope 3 category calculated in C6.5, specify how your emissions compare to the previous year and identify the reason for any change.

Purchased goods and services

Direction of change

Decreased

Primary reason for change

Other emissions reduction activities

Change in emissions in this category (metric tons CO2e)

10693

% change in emissions in this category

11

Please explain

Our estimates were based on scope 1 and scope 2 amounts. Our combined Scope 1 and Scope 2 amounts decreased, resulting in decreased scope 3 amounts.

Use of sold products

Direction of change

Decreased

Primary reason for change

Other emissions reduction activities

Change in emissions in this category (metric tons CO2e)

1709704

% change in emissions in this category

11

Please explain

Our estimates were based on scope 1 and scope 2 amounts. Our combined Scope 1 and Scope 2 amounts decreased, resulting in decreased scope 3 amounts.

End-of-life treatment of sold products

Direction of change

Decreased

Primary reason for change

Other emissions reduction activities

Change in emissions in this category (metric tons CO2e)

4728

% change in emissions in this category

11

Please explain

Our estimates were based on scope 1 and scope 2 amounts. Our combined Scope 1 and Scope 2 amounts decreased, resulting in decreased scope 3 amounts.

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	No

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	4869	4869
Consumption of purchased or acquired electricity	<Not Applicable>	9728.8	27693	37421
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total energy consumption	<Not Applicable>	9728.8	27693	42290

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Other biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Coal

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Oil

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

4791

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

HHV

Total fuel MWh consumed by the organization

78.08

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Propane + Diesel

Total fuel

Heating value

HHV

Total fuel MWh consumed by the organization

4869.08

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area

United States of America

Consumption of purchased electricity (MWh)

14626.3

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

14626.3

Country/area

China

Consumption of purchased electricity (MWh)

6442.6

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

6442.6

Country/area

Mexico

Consumption of purchased electricity (MWh)

8907.6

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]
8907.6

Country/area

Brazil

Consumption of purchased electricity (MWh)
2355

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
2355

Country/area

Sweden

Consumption of purchased electricity (MWh)
2593.9

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
2593.9

Country/area

Netherlands

Consumption of purchased electricity (MWh)
677

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
677

Country/area

Estonia

Consumption of purchased electricity (MWh)
1819

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
1819

C-CG8.5

(C-CG8.5) Does your organization measure the efficiency of any of its products or services?

	Measurement of product/service efficiency	Comment
Row 1	Yes	

C-CG8.5a

(C-CG8.5a) Provide details of the metrics used to measure the efficiency of your organization's products or services.

Category of product or service

Other, please specify (Mirror replacement technology)

Product or service (optional)

Mirror Eye Product-Reduced fuel consumption from aerodynamic design — Removing mirrors during fleet trials and in European trucks has demonstrated a fuel cost savings of roughly 2-3% per year.

% of revenue from this product or service in the reporting year

3.8

Efficiency figure in the reporting year

2.5

Metric numerator

tCO2

Metric denominator

Other, please specify (per year per vehicle)

Comment

As an example, one of our recently developed products is the MirrorEye® camera-based vision system that replaces traditional mirrors on commercial vehicles. MirrorEye®'s value proposition is focused on safety with an additional benefit of improved fuel economy when mirrors are removed. As fuel efficiency standards continue to advance, MirrorEye® is transforming commercial vehicle safety while reducing fuel consumption through advanced aerodynamics. This fuel savings translates into a positive environmental impact due to a reduction in CO2 emissions. While the safety benefit of MirrorEye® is compelling on its own, the camera monitor system also provides an aerodynamic benefit, due to the reduced surface area exposed to the airstream during vehicle operation. Based on a study conducted by an independent third party and feedback from our fleet partners, the impact of fuel consumption with MirrorEye® versus traditional mirrors, results in 2-3% improvement in fuel economy in typical applications. For a typical class 8 long haul truck, which uses roughly 11,000 gallons gasoline equivalent (based on government data) this translates into meaningful cost savings. This also translates into roughly 250 gallons of fuel saved per vehicle per year, which translates into an environmental impact of roughly 5,000 pounds (2.5 tons) of CO2 emissions reduction per year per vehicle (based on information at U.S. Energy Information Administration (EIA)). This data provides for a compelling value proposition for our customers as they should receive the return on their investment within approximately two years just on fuel savings alone, and the product aligns with our customers environmental/climate-related initiatives.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	No	Our organization invests in the R&D of electromobility components for electric vehicles, but we do not disclose specific amounts pertaining to these items.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	No third-party verification or assurance

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

Stoneridge 2022 GHG Verification Statement.pdf

Page/ section reference

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

Stoneridge 2022 GHG Verification Statement.pdf

Page/ section reference

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

No, we do not verify any other climate-related information reported in our CDP disclosure

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Other, please specify (Stoneridge solicits verification of ISO 14001 certification from a representative sample of suppliers and uses a supplier self-assessment to determine supplier efforts in achieving climate-related targets.)

% of suppliers by number

100

% total procurement spend (direct and indirect)

42

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

Stoneridge procurement qualifies and monitors our direct suppliers to improve sustainability and compliance and to meet customer demands and regulatory requirements.

(ii) coverage: The supplier assessments cover environmental protection, supply chain responsibility, anti-bribery/anti-corruption, diversity, quality management, conflicts of interest, health & safety, and human rights and labor. We have begun to include questionnaires covering energy management and carbon footprint. The survey has been launched across a representative sample of suppliers accounting for 42% of the company's production purchases. Stoneridge reinforces this assessment of practices by partnering with a third-party provider (Integrity Next) who schedules a global audit campaign among suppliers identified through the sustainable development questionnaire. Audits have been performed in Europe, Asia, North America (United States, Mexico), giving suppliers a new dimension of support in their sustainable development approach. The variety of the suppliers audited (by commodity, segment, company size, etc.) enabled Stoneridge to grasp the diversity of sustainable development practices, and to provide assistance and corrective actions in the event of failings or inadequacy in respect of Stoneridge's sustainable development standards.

Impact of engagement, including measures of success

Measure of success: The impact of this engagement is that we are provided with a more robust perspective of how our suppliers are managing their own CSR compliance which in turn allows us to improve sustainability and compliance and to meet customer demands and regulatory requirements. Suppliers are incentivized to report through our supply contracts which request that they comply with the sustainability standards as defined in our Supplier Code of Conduct. Suppliers receive a percentage of compliance and guidance on how to improve the scoring. Year over year the compliant suppliers have increased to a 77%.

Comment

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Stoneridge engages with contractors and indirect suppliers in order to drive energy efficient activities that will result in lower emissions.

Methods of engagement could include, but are not limited to:

- meetings with energy providers
- collaborative projects with HVAC and building efficiency experts

- energy audits

We prioritize the engagement with energy providers and energy efficiency experts because our scope 2 emissions are driving the majority of our scope 1+scope 2 emissions.

Our success is measured in energy savings in both MWh and energy cost per year.

One example of this engagement was the energy assessment conducted by an energy provider; the energy provider helped us design a more efficient compressor system.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement

Other, please specify (Complying with ISO 14001 and regulatory requirements)

Description of this climate related requirement

The Stoneridge Global Quality Agreement establishes the requirements and expectations for the supplier.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

12

Mechanisms for monitoring compliance with this climate-related requirement

- Certification
- Supplier self-assessment
- Second-party verification
- Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement

Retain and engage

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

No, and we do not plan to have one in the next two years

Attach commitment or position statement(s)

<Not Applicable>

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

Our participation is evaluated against and must be consistent with our Code of Conduct. Stoneridge employees are required to certify compliance with our Code. Each Stoneridge employee is required to complete an annual certification of compliance with these guidelines. This process ensures a consistent, common approach to engagement activities across business divisions and geographies.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

National Association of Manufacturers

Is your organization's position on climate change policy consistent with theirs?

Mixed

Has your organization attempted to influence their position in the reporting year?

No, we did not attempt to influence their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

National Association of Manufacturers President and CEO Jay Timmons released the following statement on President Joe Biden's climate executive orders: "Climate change is a global challenge that requires a global solution and a global partnership, and manufacturers are committed to solving the problem. We believe in an all-of-government approach to the challenge and an all-in approach to energy production. Manufacturers work hard every day developing and producing products that bring down emissions while exploring alternative energy options. But as we build our bridge to the future, we must not sacrifice our security today. North American energy independence is vital to our economic strength and for supporting families and American jobs. We cannot put that at risk by acting without a true global partnership on energy and environmental policy.

"Manufacturers have been calling on Congress to enact a single unified climate policy that meets science-based targets, ensures a level playing field without carbon leakage and preserves consumer choice and manufacturing competitiveness. Government leaders must ensure that manufacturers in the United States—the very people who are developing the technologies and processes that will help us meet the challenge—can continue innovating ways to reduce emissions, protect the environment, provide domestic energy and create jobs."

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

SRI-2022-12-31-10K.pdf
SRI 2023 proxy statement.pdf

Page/Section reference

10-K page 1 Business - Overview (Description of the business including our strategy and focus)
10-K page 11 Risk Factors - Strategic Performance Risks
10-K page 13 Item 1A. Risk Factors Environmental, Climate and Weather Risks, ESG
Proxy page iv, 15, 17, 19- Oversight of ESG Management (Governance)

Content elements

Governance
Strategy
Risks & opportunities

Comment

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	We are not a signatory/member of any collaborative framework, initiative and/or commitment related to environmental issues	<Not Applicable>

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	No, and we do not plan to have both within the next two years	<Not Applicable>	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	No, and we do not plan to do so within the next 2 years	<Not Applicable>	<Not Applicable>

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

No and we don't plan to within the next two years

Value chain stage(s) covered

<Not Applicable>

Portfolio activity

<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity

<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

<Not Applicable>

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

No and we don't plan to within the next two years

Value chain stage(s) covered

<Not Applicable>

Portfolio activity

<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity

<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

<Not Applicable>

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity-sensitive areas in the reporting year?

Not assessed

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity-related commitments
Row 1	No, we are not taking any actions to progress our biodiversity-related commitments	<Not Applicable>

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No	Please select

C15.7

(C15.7) Have you published information about your organization’s response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
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C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Human Resources Officer and Assistant General Counsel	Other C-Suite Officer

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company’s annual revenue for the stated reporting period?

	Annual Revenue
Row 1	899923000

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member
Daimler Truck AG

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
61.97

Uncertainty (±%)
1

Major sources of emissions

Natural Gas

Verified

Please select

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member

62994610

Unit for market value or quantity of goods/services supplied

Currency

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Daimler Truck AG Company comprises of 7% of our 2022 net sales

Requesting member

Daimler Truck AG

Scope of emissions

Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

<Not Applicable>

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

1108.59

Uncertainty (±%)

1

Major sources of emissions

Purchased electricity

Verified

Please select

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Currency

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Daimler Truck AG comprises of 7% of our 2022 net sales

Requesting member

Ford Motor Company

Scope of emissions

Scope 1

Scope 2 accounting method

<Not Applicable>

Scope 3 category(ies)

<Not Applicable>

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

61.97

Uncertainty (±%)

1

Major sources of emissions

Purchased Electricity

Verified

Please select

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member

62994610

Unit for market value or quantity of goods/services supplied

Currency

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Ford Motor Company comprises of 7% of our 2022 net sales

Requesting member

Ford Motor Company

Scope of emissions

Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

<Not Applicable>

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

1108.59

Uncertainty (±%)

1

Major sources of emissions

Purchased electricity

Verified

Please select

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Currency

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Ford Motor Company comprises of 7% of our 2022 net sales

Requesting member

Lear

Scope of emissions

Scope 1

Scope 2 accounting method

<Not Applicable>

Scope 3 category(ies)

<Not Applicable>

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

3.69

Uncertainty (±%)

1

Major sources of emissions

Natural gas

Verified

Please select

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member

3750000

Unit for market value or quantity of goods/services supplied

Currency

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Lear comprises of 0.4% of our 2022 net sales

Requesting member

Lear

Scope of emissions

Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

<Not Applicable>

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

65,993

Uncertainty (±%)

1

Major sources of emissions

Purchased Electricity

Verified

Please select

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

3750000

Unit for market value or quantity of goods/services supplied

Currency

Please explain how you have identified the GHG source, including major limitations to this process and assumptions madeLear comprises of 0.4% of our 2022 net sales

SC1.2**(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).****SC1.3****(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?**

Allocation challenges	Please explain what would help you overcome these challenges
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	(Our challenges are also related to diversity of customers) Simplify the allocation and keep it revenue based.

SC1.4**(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?**

No

SC1.4b**(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.**

The current method is adequate to promote continuous improvement and reduce emissions.

SC2.1**(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.****SC2.2**

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms